



FAIRFAX COUNTY

DEPARTMENT OF HEALTH

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MEMORANDUM

TO: Interested Parties

FROM: Dennis A. Hill, Director
Division of Environmental Health

SUBJECT: Request for Comments to Intended Regulatory Action to Fairfax County Code, Chapter 68, *Individual Sewage Disposal Facilities*

DATE: January 28, 2003

The Health Department is proposing to amend Chapter 68, *Individual Sewage Disposal Facilities* of the Fairfax County Code. The current Chapter 68 ordinance was adopted in January 1992. The proposed Chapter 68.1 takes into account new technology and advancements within the field of onsite sewage disposal by incorporating, with specific changes, the *Commonwealth of Virginia, State Board of Health, Sewage Handling and Disposal Regulations*.

Prior to a formal public hearing before the Fairfax County Board of Supervisors, the Health Department is soliciting comments on the draft amendments. A copy is available for review at our office Monday through Friday 8:00 a.m. to 3:30 p.m. or on the Health Department Website, at <http://www.fairfaxcounty.gov/service/hd/chapt68drft.htm>.

We will appreciate your taking the time to let us know your comments and opinions on the proposed draft amendments. Your input will be valuable to us in our preparation of the final proposed amendments. We will review all of the comments and suggestions that are submitted and will incorporate them into the final draft as appropriate. The Fairfax County Board of Supervisors will be requested to schedule a public hearing in May 2003 to consider adoption of the amendments into the Fairfax County Code.

Comments may be submitted in writing, by phone on (703) 246-3579, or by email. The comment period for this informal phase will end March 1, 2003.

Major proposed changes to the ordinance, as enumerated below, are intended to enhance protection for homeowners and the environment and to conform to the urbanized Fairfax County population and lifestyle. Many of the proposed amendments are presently being enforced through Agency procedural policies.

1. Experimental and provisional onsite sewage disposal systems will not be allowed for new home construction unless an approved sewage disposal system site is located on the lot with 100% reserve replacement area. Experimental and provisional onsite sewage disposal systems are unproven. By requiring an approved replacement site and reserve area, the new homebuyer is protected should the unproven system fail.
2. The onsite sewage disposal systems will be designed based not only on the numbers of bedrooms but also on the square footage of the dwelling, excluding the garage space. The design sewage flows for all dwellings with up to 3,300 square feet will be based on 150 gallons per day per bedroom. If the dwelling exceeds 3,300 square feet in size an additional 100 gallons per day will be added to the design for each 750 square feet greater than 3,300 square feet. A random study of homes exceeding 3,300 square feet in the county demonstrated water usage beyond the design capacity of the onsite sewage disposal system. Excessive water use beyond the design capacity of the system will saturate the absorption area thus leading to premature failure. The additional design requirement is intended as a safeguard in times of peak sewage flows.
3. A minimum reserve area equal to 100% of the total absorption area will be required for all new lots established after January 1, 2003. Presently systems utilizing a flow diversion valve require 50% of the total absorption area as reserve. Systems that do not utilize a flow diversion valve require 100% of the total absorption area as reserve. Requiring 100% reserve area assures the homeowner that adequate replacement area is available if their sewage disposal system fails. Raising the reserve area requirement from 50% to 100% will give the homeowner the assurance that the system can be totally replaced if it should fail. The areas of premium soils for onsite sewage disposal in the county are quickly being exhausted. As lots with marginal soils are being developed for onsite sewage disposal additional safeguards are necessary to protect the homeowners investment.
4. Shallow placed onsite sewage disposal systems such as drip disposal, raised filter beds, and peat bio-filtration are limited to soil depths no less than 12" and no more than 22". Current county policy limits installation of shallow placed onsite sewage disposal systems to soil depths between 12" and 22". State regulations do not have a minimum depth of installation and have a maximum depth of 18". Systems installed at a depth of at least 12" provide adequate soil area for sewage effluent treatment and provide thermal protection from extreme cold. Systems installed shallower than 12" are prone to damage by vehicular type traffic to include construction equipment and large lawn mowers.
5. Testing soils for shallow placed system must utilize hydraulic conductivity testing in conjunction with standard soil profile hole evaluations. Hydraulic conductivity testing allows a more thorough evaluation of soils being proposed for an onsite sewage disposal system.

6. The maximum allowable soil backfill over a septic tank shall not exceed 48" in depth. Top-seam septic tanks must be used where there are water table soils. Currently, there is no maximum depth for septic tank placement. Septic tanks installed deeper than 48" present problems in maintaining and servicing. In addition safety hazards exist during installation due to the large and deep excavations required for placement of the tank. Septic tanks constructed with top-seam lids are very effective in preventing water intrusion in soils with high water table conditions that can lead to premature failure of the onsite sewage disposal system.
7. Absorption trenches shall be installed at a minimum depth of 22" and a maximum depth of 120". Currently, the minimum absorption trench depth is 12" with no maximum depth. Increased depth of installation increases the potential of groundwater contamination. Aerobic biological activity is significantly reduced when systems are placed at depths greater than 120". The result is poorly treated sewage reaching the groundwater table.
8. Existing structures that are expanded in excess of 50% of the original square footage, excluding garage shall be considered "new" and require a new drainfield. Water usage and sewage flows will significantly increase when expanding an existing structure greater than 50% of the original square footage. By requiring a new septic system on a large expansion or addition the homeowner is protected from premature system failure. Increased sewage flows will overtax older onsite sewage disposal systems. In Fairfax County many older homes have undergone extensive expansions resulting in the homes being sold as "new". The new homebuyer is left with a false impression that the septic system is also new.

Thank you in advance for your valuable input into the review of the draft amendments. If you have any questions concerning the draft amendments please contact Glenn Smith (703-246-2332), John Milgrim (703-246-3579) or Kevin Wastler (703-246-2292).